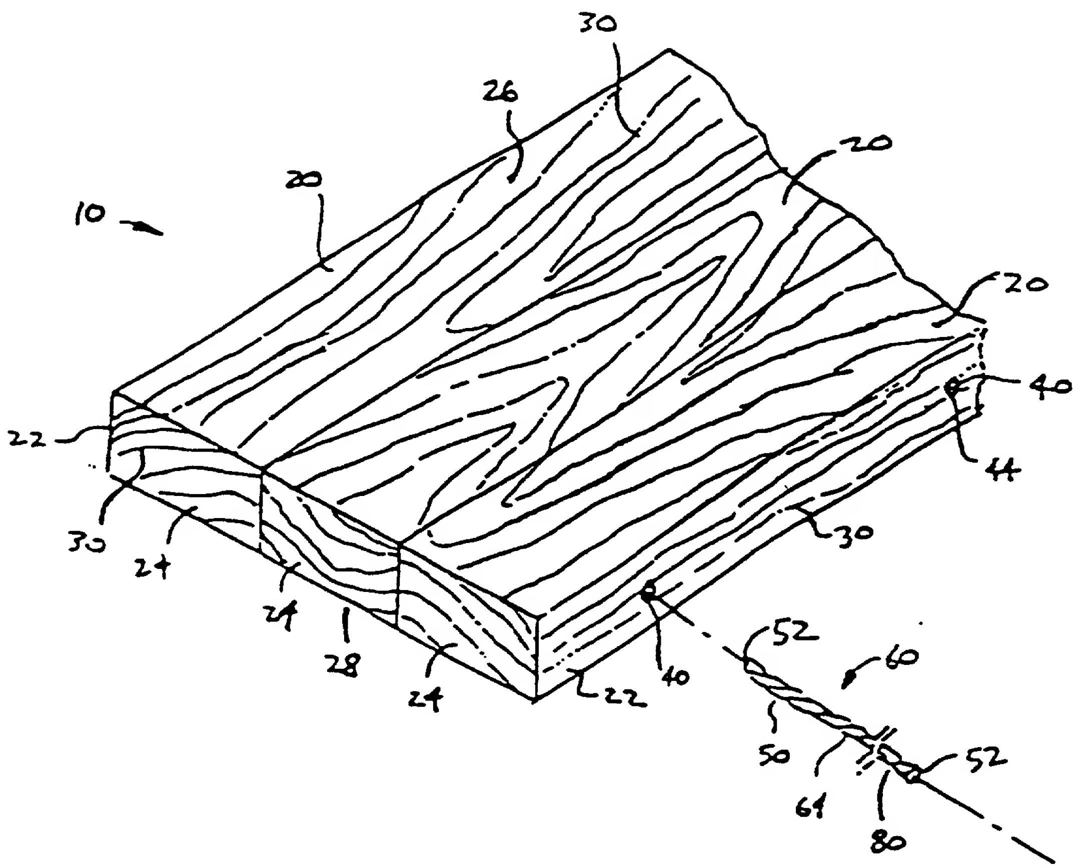

FIG. 1

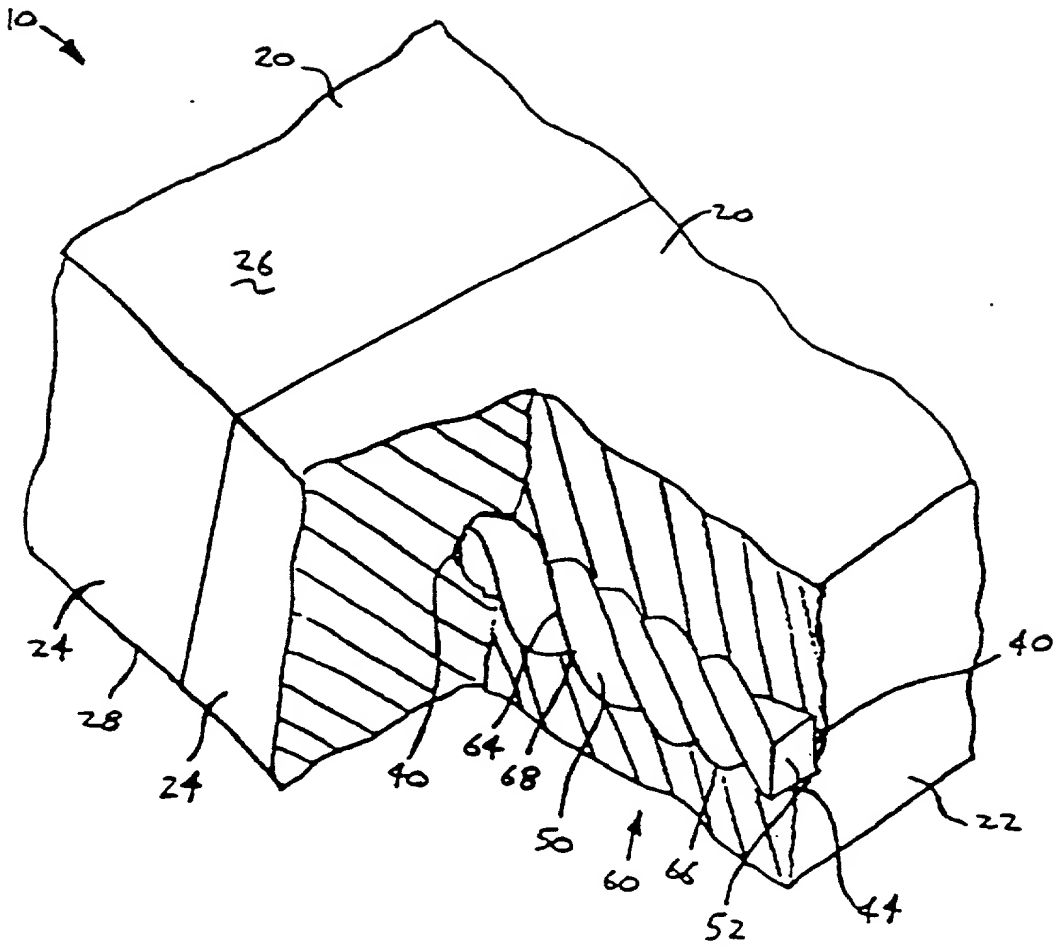

FIG. 2

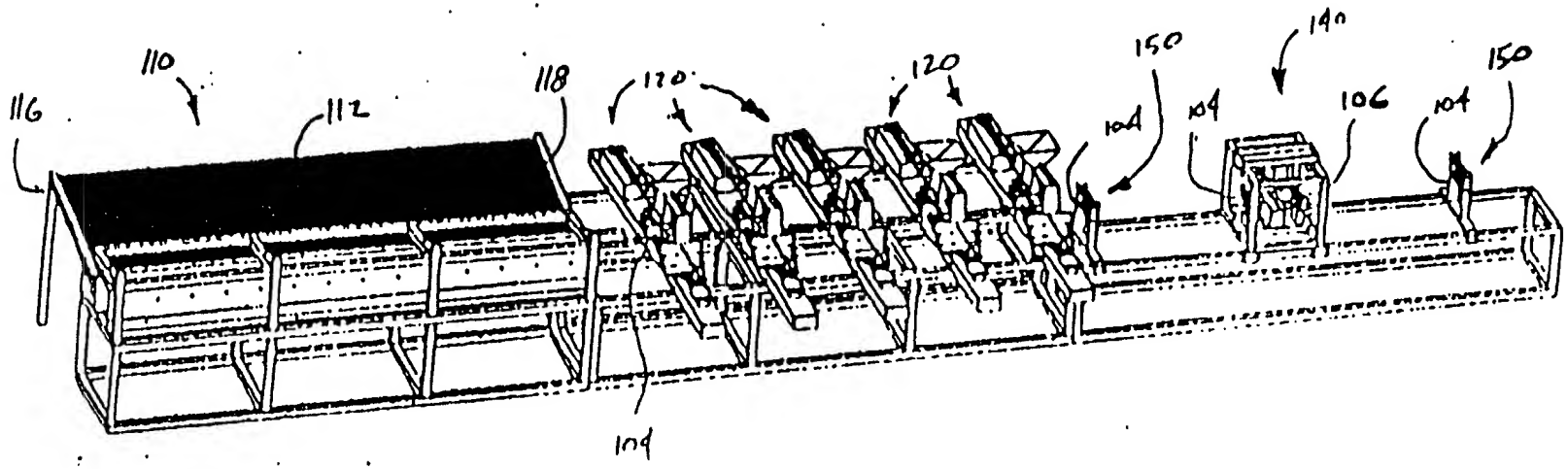

Fig. 3

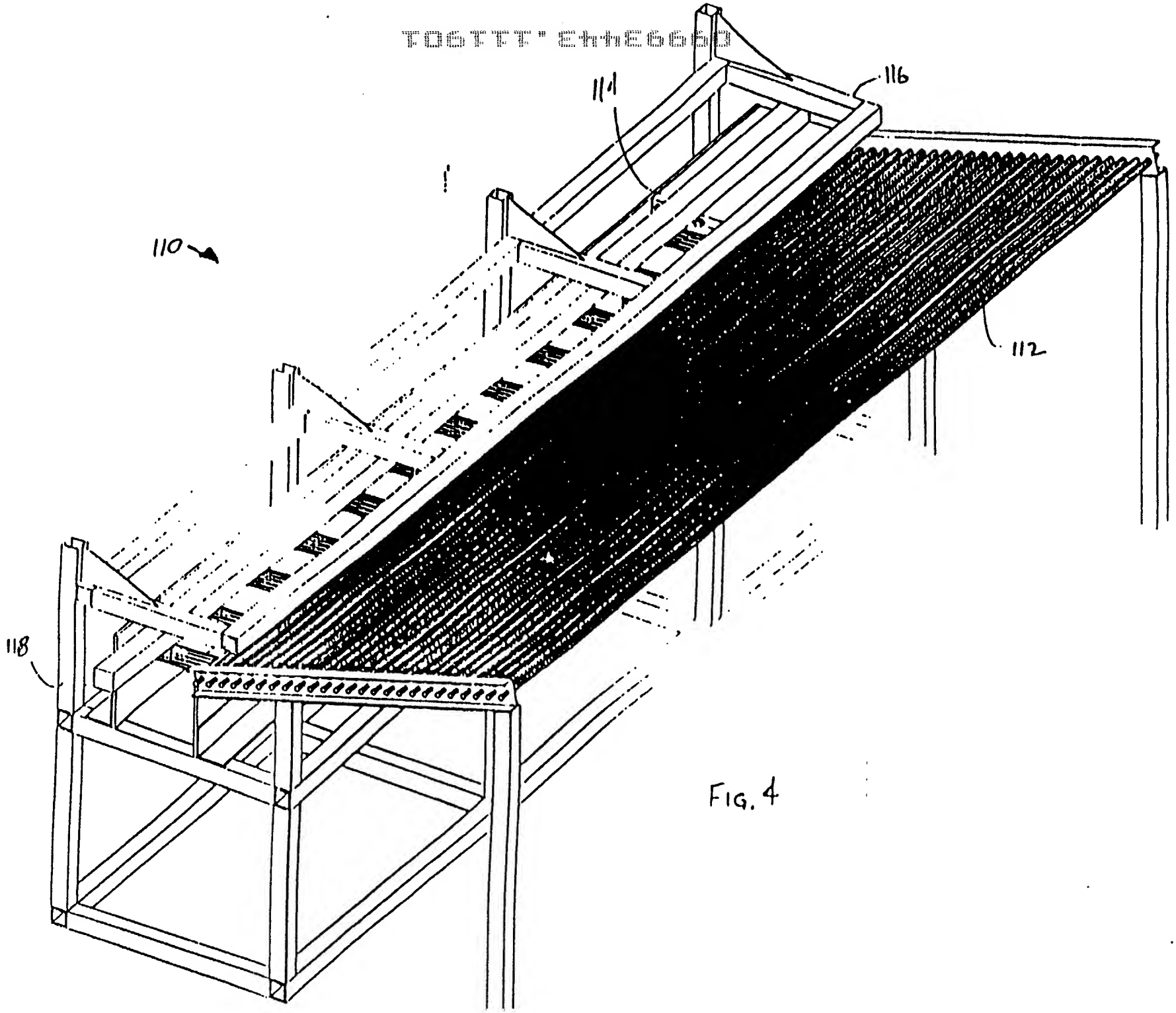

FIG. 4

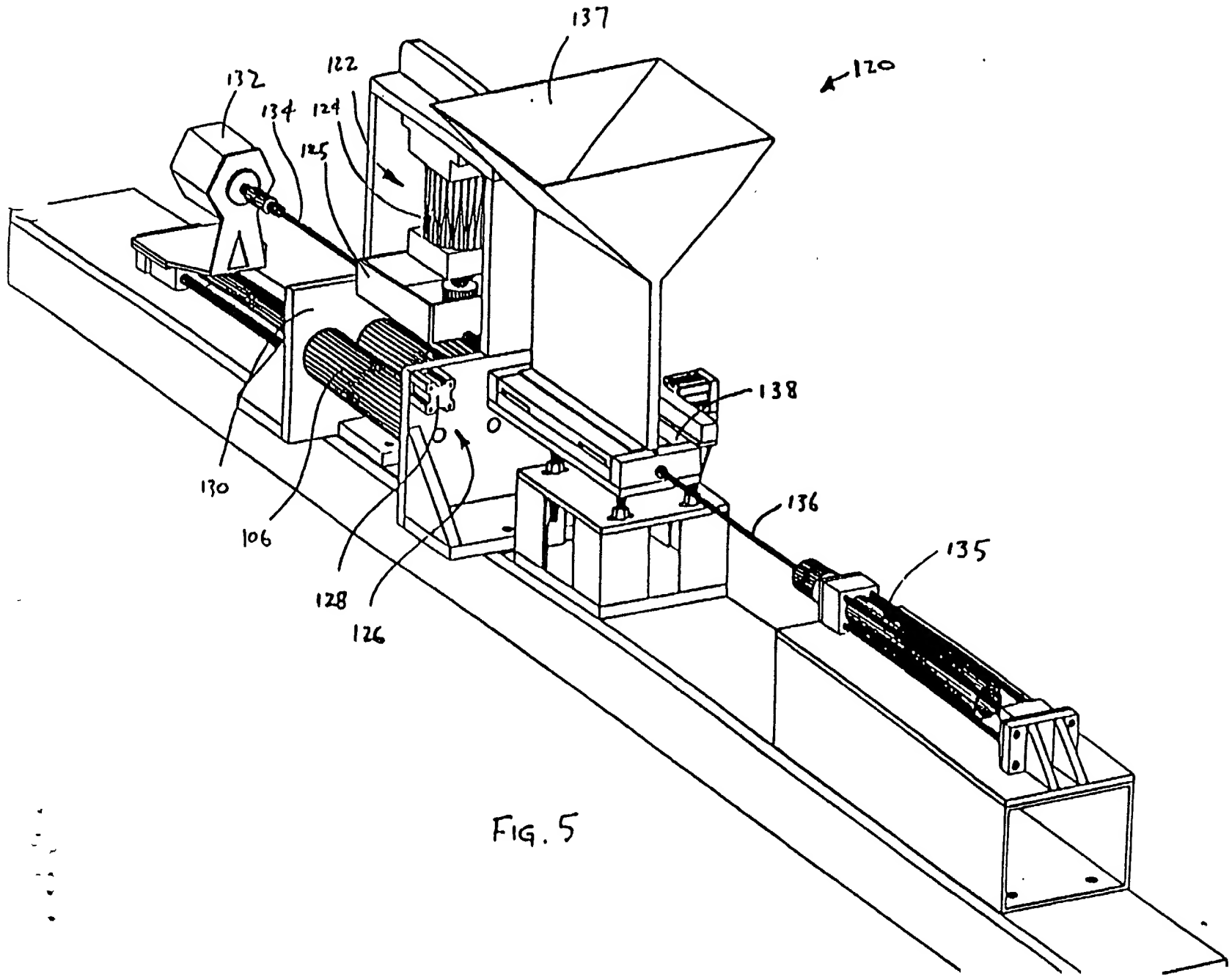

FIG. 5

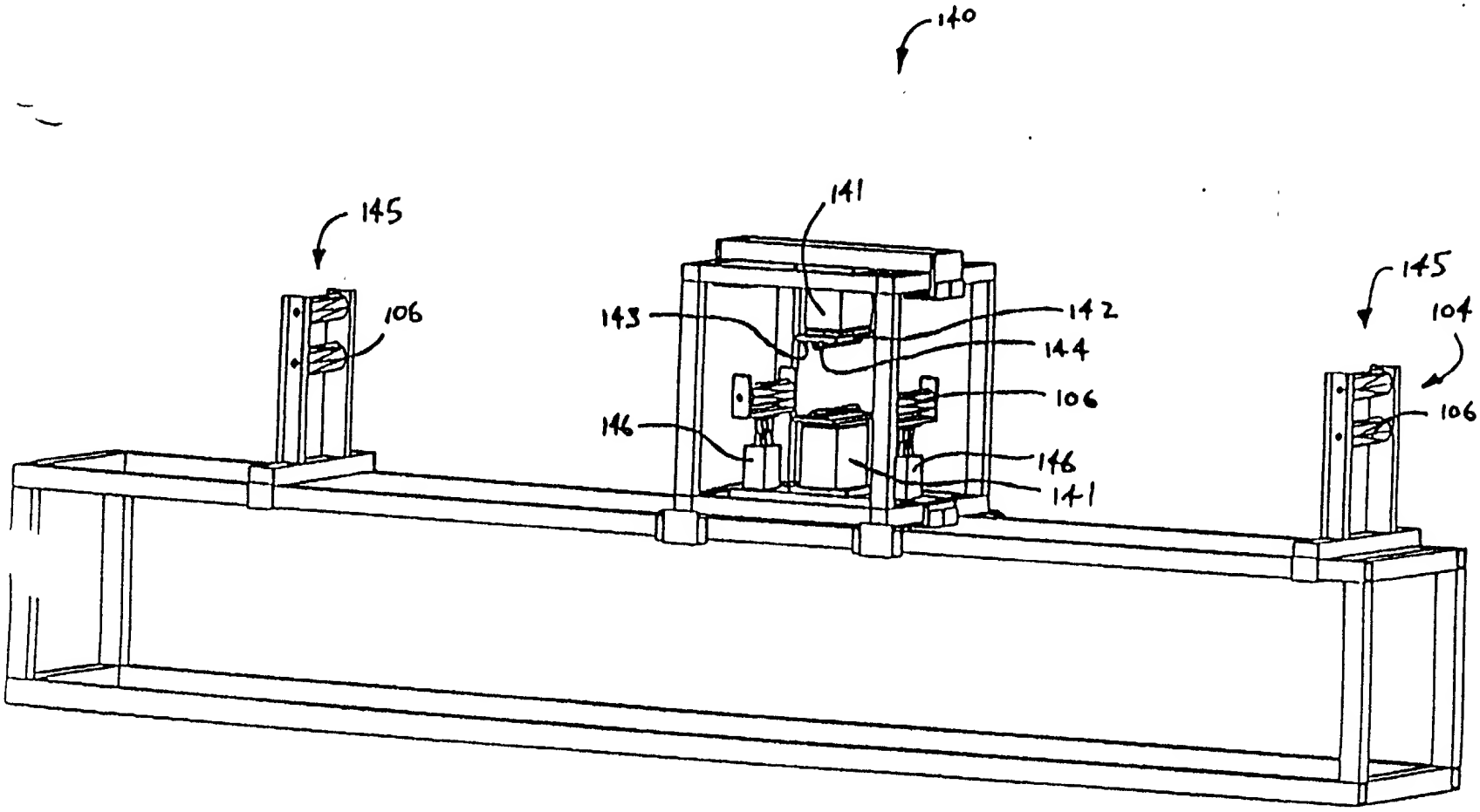

FIG. 6

HEE S/N	Side	Date Marked on Board	Test 1	Test 2	Test 3
			Deflection @ 500 lbs,in.	Deflection 1 Board @ 500 lbs,in.	Max Load,lbs/Deflection/Failnre
1	A	12-94	1.975	2.282	1527 lbs/6.385"/simple tension
1	B	12-94	2.002	2.034	
2	A	12-94	2.378	2.308	1648 lbs/7.760"/full deflection reached with no failure
2	B	12-94	2.508	2.271	
3	A	12-94	2.157	2.124	1652 lbs/6.844"/simple tension
3	B	12-94	1.996	2.051	
4	A	11-94	2.002	2.174	1774 lbs/7.438"/full deflection reached with no failure
4	B	11-94	2.005	2.112	
5	A	11-94	1.594	N/A	2147 lbs/6.785"/cross-grain tension failure
5	B	11-94	1.810	N/A	
6	A	11-94	1.914	N/A	1009 lbs/4.275"/simple tension
6	B	11-94	2.081	N/A	

Fig. 7

Figure 8

COMPARISON RESULTS			
	Pinned	**Solid**	**Laminated**
Modulus of Elasticity	2.0×10^6	1.8×10^6	2.15×10^6
Flexural Stress	2,600 psi	2,200 psi	2,900 psi
Horizontal Sheer Stress	120 psi	90 psi	145 psi

Figure 9

FAILURE RESULTS		
Type of Board	**Average Failure Load (lbs)**	**Comments**
Pinned	2,700 psi	One member out of three fail first
Solid	2,200 psi	Whole unit fails
Laminated	2,400 psi	Whole unit fails

Figure 10

DEFLECTION RESULTS		
Type of Board (7 ft span)	**Deflection @ 50 psf Load (in)**	**OSHA Allowable Deflection (in)**
Pinned	0.73	1.4
Solid	0.81	1.4
Laminated	0.73	1.4